

REMARKS

Claims 1-24 are pending in the present application. In the Final Office Action mailed November 1, 2005, the Examiner rejected claims 1-3, 7-12 and 15 under 35 U.S.C. §102(b) as being anticipated by Knott (USP 5,511,105). The Examiner next rejected claims 13 and 14 under 35 U.S.C. §103(a) as being unpatentable over Knott. Claims 4-6, 13, 14, and 16-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Sohval et al. (USP 4,637,040) in view of Knott.

Claims 1-2 and 4-17 were presented after-final on December 20, 2005. Responsive thereto, the Examiner mailed an Advisory Action reiterating the rejection of the claims based on the patent to Knott. In reiterating the rejections to claims 1-2 and 4-17, the Examiner states that “the specification (of the applicant) fails to show any teachings (different from the prior art) how the x-ray beams originated from the closely situated focal spots having same spatial coverage.” Advisory Action, p. 2. As such, the “Examiner considers that (Fig. 1) a beam exit window (24), defining the maximum aperture of which the x-ray beams pass, will provide the similar spatial coverage for the x-ray beams originated from the closely situated focal spots.” Id.

Applicant is unclear as to the relevance of the Examiner’s contention that the present application fails to provide any teaching different from the prior art as to how x-ray beams that originate from closely situated focal spots having the same spatial coverage. Specifically, as set forth in paragraph 37 of the application, Applicant does disclose a construction in its anode assembly that is not disclosed by Knott.

Anode disc 92 includes a bevel or tapered region 98 that extends from face 100. Mounted to or integrally formed within the bevel region 98 are multiple electrode target tracks 102 that extend circumferentially around the anode disc 92. The multiple electrode target tracks are preferably formed of tungsten but other materials high in melting point temperature and atomic number may also be used. Each electrode target track is designed to emit an x-ray fan beam in response to electrons striking thereon. Angle θ corresponds to an anode target angle and defines the amount of taper from anode disc face 100. Angle θ is selected based on the desired spatial coverage of the fan beam generated by each electrode target 102. For large field area coverage, the anode disc is constructed to have a larger anode target angle θ . In contrast, for smaller coverage, a more acute beveling is used. Additionally, a smaller anode angle provides a

smaller effective focal spot for the same actual focal area. One skilled in the art will readily appreciate that a smaller effective focal spot size provides better spatial resolution. However, a smaller or more acute anode target angle limits the size of the usable x-ray field due to cut-off of the x-ray fan beam.

Application, ¶37.

Additionally, the Examiner's statements acknowledged that the reference fails to teach each and every element called for in claims 1-2 and 4-17 as required to support a rejection under 35 U.S.C. §102. That is, the Examiner "considers that (Fig. 1) a beam exit window (24), defining the maximum aperture of which the x-ray beams pass, will provide the similar spatial coverage for the x-ray beams originated from the closely situated focal spots." Advisory Action, p. 2. This "consideration" of the art amounts to drawing an inference from the reference that the reference does not support. Knott discloses an x-ray beam exit window. As previously presented to the Examiner, a beam exit window sized to pass multiple beams is exactly that – a window, and with all windows, it defines only the maximum of which that will pass, not also the minimum. Therefore, Knott discloses a shared window through which x-ray beam pass, but does not teach that the x-ray beams that pass therethrough have the same or substantially the same spatial coverage. Accordingly, claims 1-2 and 4-17 are believed to be patentably distinct from that disclosed by the reference.

Applicant has also presented new claims 25-34. These claims are believed to further define the invention over the art of record. Specifically, the art of record fails to teach or suggest a CT system having a anode disc with multiple x-ray sources that project fan beams at different angles of projection relative to one another. Also, the art of record fails to teach or suggest an anode disc assembly having a first and second x-ray source that each project fan beams such that the fan beam of one x-ray source is enveloped by the fan beam of the other x-ray source.

Therefore, in light of at least the foregoing, Applicant respectfully believes that the present application is in condition for allowance. As a result, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 1-2 and 4-17.

Applicant appreciates the Examiner's consideration of these Amendments and Remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved.

Respectfully submitted,

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